

BEFORE THE
POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

IN THE MATTER OF)
HOWARD F. CLERF,)
)
Appellant,)
v.)
)
STATE OF WASHINGTON,)
DEPARTMENT OF ECOLOGY,)
)
Respondent.)

PCHB No. 78-98

FINAL FINDINGS OF FACT,
CONCLUSIONS OF LAW
AND ORDER

This appeal challenges the validity of a condition of a ground water permit issued by the Department of Ecology (DOE) permitting an increase in the use of water from appellant's artesian well. This matter came on for hearing before the Pollution Control Hearings Board, Dave J. Mooney, Chairman, Chris Smith, Member and David A. Akana, Member, on August 21, 1978, in Ellensburg, Washington. Hearing examiner Robert J. Rankin presided. Appellant elected a formal hearing pursuant to RCW 43.21B.230. Appellant was represented by Harrison K. Dano, an attorney with offices in Moses Lake, Washington. Respondent DOE was represented by Laura E. Eckert, an Assistant Attorney General. The

RR/DA/LB

1 court reporter was Kathie Brodie.

2 Witnesses were sworn and testified. Having heard the testimony
3 and having read the deposition of Patrick Crawford, and having considered
4 the exhibits, and being fully advised, the Pollution Control Hearings
5 Board takes these

6 FINDINGS OF FACT

7 I

8 Appellant appeals a decision of DOE conditionally granting him the
9 right to increase the flow of water from an artesian well. The requirement
10 appealed from was set forth in the Findings of Fact and Order which
11 accompanied appellant's permit No. G4-24426 dated March 31, 1978.
12 Following is the special provision appealed from:

13 7. . . . Currently the casing installed in the well
14 terminates at 110 feet below land surface.
15 That casing does not prevent utilization of
16 water from the low head artesian aquifers
17 which supply water to the nearby springs.
18 Therefore, the casing shall be extended to a
19 minimum of 200 feet below land surface and it
20 shall be pressure grouted with concrete to
effectively seal the casing into the hard
basalt formation at that elevation. The
sealing process must also provide a tight
seal at the upper, or 110-foot, end of the
extension work.

21 . . .

22 II

23 Appellant owns Sec. 27, T. 18 N., R. 20 EWM in Kittitas County,
24 Washington. The land is semi-arid in character and consists of
25 rolling hills at an average elevation of approximately 2,200 feet.
26 Appellant traces his titles to the property back to the original
27 homesteader, Christensen, who settled on the property in approximately
1880.

1 III

2 There are approximately 25 to 35 small springs and seeps located
3 along a line paralleling Parke Creek which runs generally southwesterly
4 across the easterly side of Section 27. Parke Creek runs intermittently;
5 through Section 27, it is fed by the runoff of the springs and seeps
6 located along the bank. The springs have provided water for domestic
7 use, stockwatering and irrigation of approximately twenty acres within
8 Section 27 since the land was first homesteaded.

9 IV

10 In September, 1975, DOE issued permit No. G4-24093, which authorized
11 construction of a well in the northeast corner of Section 27, near the
12 banks of Parke Creek, with a maximum instantaneous withdrawal of 2,000
13 gallons per minute (gpm) to irrigate 200 acres. DOE's order granting
14 this permit recognized the possibility that the well would encounter
15 artesian aquifers, and cautioned that the well might require casing and
16 sealing to an unspecified depth to prevent leakage from these aquifers.

17 The well in question was drilled to 460 feet in 1976. The well bore
18 penetrated a low-pressure aquifer zone at 120 feet, and a high-pressure
19 aquifer zone at 440 to 465 feet, capable of a maximum instantaneous
20 flow of 3,000 gpm, with a constant pressure of 100 pounds per square
21 inch when sealed. The well was drilled to a 10-inch diameter to 110 feet;
22 it was cased with eight inch pipe, and pressure grouted to this point. The
23 remaining 350 feet is eight inches, uncased.

24 V

25 In September, 1976, appellant applied for a permit (G4-24426)
26 to withdraw an additional 500 gpm from the well to irrigate an

27 FINAL FINDINGS OF FACT,
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1 additional fifty acres. Such permit was granted on several
2 conditions, all of which appellant has conceded with the exception
3 of special provision Number Seven which is the subject of this
4 appeal and set forth in Finding of Fact I above.

5 VI

6 Appellant's well is leaking upward from the lower aquifer (460 feet)
7 through the lower pressure upper aquifer at the 125 foot level. Such
8 leakage is a potential source of waste of public water and will
9 contribute to a reduction in the artesian pressure of the two other
10 wells located nearby at some future time.

11 Further, after continued purping of the well, when the pressure
12 in the lower aquifer falls below the pressure exerted on it by the
13 upper aquifer, waste of public water will occur from the upper to the
14 lower aquifer.

15 We are unable to determine whether the springs are connected
16 to the upper (low pressure) aquifer.

17 VII

18 The Board concludes on the basis of the evidence presented that
19 appellant's well is located in a complex aquifer system which has
20 not been fully analyzed or documented, and that the evidence
21 is not sufficient to show that the flow of water in the spring
22 near appellant's well has been enhanced or altered as a result of
23 appellant's well. Nor can it be established that the waters in
24 the spring and the well are derived from a common source.

25 VIII

26 Any Conclusion of Law which should be deemed a Finding of Fact

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1 is hereby adopted as such.

2 From these Findings, the Board comes to these

3 CONCLUSIONS OF LAW

4 I

5 The Board has jurisdiction to hear this matter pursuant
6 to RCW 43.21B.

7 II

8 The Department has power to regulate the construction of ground
9 water wells, and, in addition, the power to regulate the conditions
10 under which permits previously issued may be amended, RCW 90.44.100;
11 .110; .120.

12 III

13 The preponderance of the conflicting evidence fails to show that
14 appellant's present use is directly connected to the springs sought to
15 be protected by condition seven of appellant's permit. Therefore,
16 respondent's actions cannot be supported on that basis.

17 IV

18 The evidence is clear, however, that appellant's well intercepts
19 an artesian aquifer at about the 110 foot to 128 foot depth (the
20 "upper aquifer"). Water from the higher pressure lower aquifer can
21 escape from the well into the upper aquifer, thereby allowing a loss
22 of water and pressure from the lower aquifer. Although it cannot now
23 substantiate where the water goes, respondent has sufficiently
24 demonstrated that water and pressure from the lower aquifer is being
25 lost. This showing adequately supports imposition of condition seven
26 of the permit which the Department is empowered to do. RCW 90.44.110.

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1 The Department's witness opines that the well must be cased past the
2 128 foot depth to some further depth between 40 and 90 feet beyond its
3 existing 110 foot casing. The casing does not have to reach the 200
4 foot depth to protect the water resource. The Department's condition
5 requiring casing to the 200 foot depth is, to that extent, unreasonable
6 and should be reconsidered.

7 V

8 The Board makes no conclusion regarding the effect of appellant's
9 rights in the springs and seeps which exist in the vicinity of appellant's
10 well. The Department's contention, if proven, would tend to show an
11 enhanced flow to such springs and at a later time if the Department can
12 show such a condition exists and a potential for waste of water is
13 thereby created, appellant's right in the spring water may become
14 significant. RCW 90.44.120; WAC 508-12-250.

15 VI

16 Any Finding of Fact which should be deemed a Conclusion of Law
17 is hereby adopted as such.

18 From these Conclusions the Board makes this

19 ORDER

20 The Department of Ecology permit No. G4-24426 is reranded to
21 conform with Conclusion of Law IV, and as modified, the permit is
22 affirmed.

23 DATED this 29th day of September 1978.

24 POLLUTION CONTROL HEARINGS BOARD

25 DAVE J. MOONEY, Chairman

26 Chris Smith, Member

27 David Akana, Member

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